

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application. Please amend the claims as follows:

Listing of Claims:

1-40. (Cancelled)

41. (Currently amended) A method, executed in a computer system, for automatically creating data exchange schema data on a network server corresponding to remote processing services provided by the network server for source code corresponding to data processing objects used to provide the remote processing services upon receipt of a request from a client, the method comprising:

storing a source code file within the mass storage of the server;

receiving a processing service request;

determining the processing service to be performed by examining one or more items of payload data in the processing service request;

determining if a compiled version of the data processing object for the processing service requested is stored in a web services library;

if the data processing object is not stored in the web services library, compiling the source code file to generate a data processing object, the data processing object providing the requested processing service;

automatically generating the data exchange schema data that specifies how to exchange data between the server and the client for the data processing object, the data exchange schema data generated when the source code file is compiled to generate the data processing object, the data exchange schema data being a separate description from

the data processing object;

storing both the data exchange schema data and the data processing object within the web services library for use by subsequent processing service requests;

receiving a first subsequent processing service request from ~~for~~ a subsequent client;

determining if a compiled version of the data processing object is stored in the web services library;

if the data processing object is stored in the web services library, separately providing the data exchange schema data to the subsequent client, the subsequent client determining format and function of input and output arguments of the data processing object from the data exchange schema data;

receiving a second subsequent processing service request from the subsequent client, subsequent payload data for the data processing object, the second subsequent processing service request comprised of payload data received in accordance with the data exchange schema data; ~~and~~

in response to receiving the subsequent payload data, in the second subsequent processing request, executing the data processing object to generate a response; and providing the requested processing service to the subsequent client.

sending the response to the subsequent client.

42. Cancelled

43. (Currently amended) The method according to claim 41~~2~~, wherein data exchange schema data comprises an HTML representation for a web page containing a description of exposed data processing services.

44. (Original) The method according to claim 43, wherein the web page comprises:

a textual description of each exposed data processing service based upon data stored within the source code file;

a description of each input argument accepted by each exposed data processing service, the description includes a description of the input argument and a description of the data format for the input argument data expected by the exposed data processing service; and

a description of each output data value generated by each exposed data processing service.

45. (Original) The method according to claim 44, wherein the description of each input argument further comprises an input field upon the generated web page for permitting a user to input a value to be passed to the exposed data processing service as the corresponding input argument.

46. (Original) The method according to claim 45, wherein the description of each output data value generated by each exposed data processing service further comprises an activate button which causes the remote data processing service to be activated using the values contained within the input fields corresponding to the input arguments as the input arguments submitted with the remote data processing service request.

47. (Currently amended) The method according to claim 41~~2~~, wherein the data exchange schema data comprises a specification for the input and output data schema expressed in a data transfer specification language.

48. (Original) The method according to claim 47, wherein the data transfer specification language comprises a Web Services Description Language representation for the data exchange schema data.

49. (Original) The method according to claim 47, wherein the data transfer specification language comprises a Resource Description Format representation for the data exchange schema data.

50. (Currently amended) A computer readable storage medium executable program data product readable by a computing system and encoding instructions for automatically creating data exchange schema data on a network server corresponding to remote processing services provided by the network server for source code corresponding to data processing objects used to provide the remote processing services upon receipt of a request from a client process, the computer process comprising:

storing a source code file within the mass storage of the server;

receiving a processing service request;

determining the processing service to be performed by examining one or more items of payload data in the processing service request;

determining if a compiled version of the data processing object for the processing service requested is stored in a web services library;

if the data processing object is not stored in the web services library, compiling the source code file to generate a data processing object, the data processing object providing the requested processing service;

automatically generating the data exchange schema data that specifies how to exchange data between the server and the client for the data processing object, the data

exchange schema data generated when the source code file is compiled to generate the data processing object, the data exchange schema data being separate from the data processing object;

storing both the data exchange schema data and the data processing object within the web services library for use by subsequent processing service requests; and

receiving a first subsequent processing service request from ~~for~~ a subsequent client;

determining if a compiled version of the data processing object is stored in the web services library;

if the data processing object is stored in the web services library, separately providing the data exchange schema data to a subsequent client, the subsequent client determining format and function of input and output arguments of the data processing object from the data exchange schema data;

receiving a second subsequent processing service request from the subsequent client, subsequent payload data for the data processing object, the second subsequent processing service request comprised of payload data received in accordance with the data exchange schema data; and

in response to receiving the subsequent payload data, in the second subsequent processing request, executing the data processing object to generate a response; and providing the requested processing service to the subsequent client.

sending the response to the subsequent client.

51. Cancelled.

52. (Currently amended) The computer readable storage medium ~~program~~

~~data product~~ according to claim 50~~1~~, wherein data exchange schema data comprises an HTML representation for a web page containing a description of exposed data processing services.

53. (Currently amended) The computer readable storage medium ~~program~~
~~data product~~ according to claim 52, wherein the web page comprises:

a textual description of each exposed data processing service based upon data stored within the source code file;

a description of each input argument accepted by each exposed data processing service, the description includes a description of the input argument and a description of the data format for the input argument data expected by the exposed data processing service; and

a description of each output data value generated by each exposed data processing service.

54. (Currently amended) The computer readable storage medium ~~program~~
~~data product~~ according to claim 53, wherein the description of each input argument further comprises an input field upon the generated web page for permitting a user to input a value to be passed to the exposed data processing service as the corresponding input argument.

55. (Currently amended) The computer readable storage medium ~~program~~
~~data product~~ according to claim 54, wherein the description of each output data value generated by each exposed data processing service further comprises an activate button which causes the remote data processing service to be activated using the values contained within the input fields corresponding to the input arguments as the

input arguments submitted with the remote data processing service request.

56. (Currently amended) The computer readable storage medium ~~program~~
~~data product~~ according to claim 50~~4~~, wherein the data exchange schema data
comprises a specification for the input and output data schema expressed in a data
transfer specification language.

57. (Currently amended) The computer readable storage medium ~~method~~
according to claim 56, wherein the data transfer specification language comprises a
Web Services Description Language representation for the data exchange schema
data.

58. (Currently amended) The computer readable storage medium ~~method~~
according to claim 56, wherein the data transfer specification language comprises a
Resource Description Format representation for the data exchange schema data.